MATERIAL SAFETY DATA SHEET

In compliance with OSHA 29 CFR 1910.1200

N.ap means Not Applicable NIA means No Information Available

PREPARED BY: DR.W.R.ASHCROFT DATE PREPARED: 21 OCT 1997 PAGE 1 OF 4

BELZONA INC.,

2000 N.W. 88 COURT.

MIAMI,

EMERGENCY PHONE NUMBERS (Spill, Leak, Fire, Exposure or Accident)

800 424 9300 - Toll free in United States

FL 33172 202 483 7616 - For calls from outside the United States

INFORMATION PHONE NUMBER

305 594 4994 - Working hours only

## **SECTION I - PRODUCT IDENTIFICATION**

PRODUCT NUMBER : 1004/1334-1335

PRODUCT NAME : Belzona<sup>®</sup> 1341 (Supermetalglide) Base Gray & Blue (NSF Grade)

PRODUCT CLASS : Modified polyamine

# SECTION II - HAZARDOUS INGREDIENTS/TOXICOLOGICAL DATA

Hazardous Components	% by Weight	CAS Number	Expo OSHA PEL mg/m <sup>3</sup>	osure Lii A ppm r	CGIH TLV	LE Oral mę	Toxicity ) <sub>50</sub> Dermal g/Kg	LC <sub>50</sub> Inhal ppm
Isophoronediamine	7-13	2855-13-2	NIA	NIA	NIA	NIA	NIA	NIA
Benzyl alcohol	10-30	100-51-6	NIA	NIA	NIA	1230	NIA	NIA
Titanium dioxide	7-13	13463-67-7	15	N.ap	10	NIA	NIA	NIA

## CARCINOGENICITY

No data is available for the mixture, however, none of the ingredients are listed as carcinogens by OSHA, NTP, ACGIH or IARC.

## **SECTION III - PHYSICAL DATA**

APPEARANCE AND ODOR : Gray or blue thixotropic paste with amine odor.

BOILING POINT : >150°C SPECIFIC GRAVITY : 1.6
VAPOR PRESSURE : NIA VAPOR DENSITY : NIA
EVAPORATION RATE : NIA % VOLATILE BY VOLUME : 0

SOLUBILITY IN WATER : Moderate (1-10%)

# **SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

FLASH POINT : >100°C EXPLOSION LIMITS LOWER : NIA TEST METHOD : Setaflash UPPER : NIA

PRODUCT NAME : Belzona® 1341 Base Gray & Blue (NSF Grade) PAGE 2 OF 4
PRODUCT NUMBER : 1004/1334-1335 DATE PREPARED : 21 October 1997
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OSHA FLAMMABILITY CLASS : N.ap FLAMMABILITY INDEX (NFPA) : 1 Slight REACTIVITY INDEX (NFPA) : 1 Slight HEALTH HAZARD (NFPA) : 2 Moderate

EXTINGUISHING MEDIA : Water fog (not a direct stream of water), foam, carbon dioxide,

dry chemical.

## SPECIAL FIRE FIGHTING PROCEDURES

Wear protective clothing and use self-contained breathing apparatus to protect against any toxic fumes evolved. Full bunker gear should be worn in extreme cases. Use sand to contain burning material.

## UNUSUAL FIRE AND EXPLOSION HAZARDS

Decomposition and combustion products may be hazardous.

# **SECTION V - HEALTH HAZARDS**

ROUTE(S) OF ENTRY : Skin contact, skin absorption, eye contact and inhalation.

PRIME HAZARD(S) : Irritant

**EFFECTS OF EXPOSURE** 

Acute : Irritating to eyes, respiratory system and in contact with skin.

Chronic : Sensitization and dermatitis.

**EMERGENCY AND FIRST AID PROCEDURES** 

Inhalation : If symptoms are experienced, remove source of contamination and/or move

victim to fresh air. If recovery is delayed or there are signs of distress obtain

medical attention immediately.

Eye contact : Flush eyes with water for 15 minutes. Seek medical advice if any irritation

persists.

Skin contact : Immediately remove excess with a clean cloth and wash skin thoroughly with

soap and water. If irritation or inflammation persists, seek medical advice.

Ingestion : If swallowed, do not induce vomiting. Rinse mouth with water and drink plenty

of water. Call TAMPA BAY Regional Poison Center (Tel.No.1-800-282-3171) and/or seek medical advice.

# MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Skin, eye and respiratory conditions.

## **SECTION VI - REACTIVITY DATA**

STABILITY: Stable

STABILITY CONDITIONS TO AVOID: N.ap

## INCOMPATIBILITY (MATERIALS TO AVOID CONTACT WITH)

Strong oxidizing agents, acids or epoxy resins, under uncontrolled conditions.

PRODUCT NAME : Belzona® 1341 Base Gray & Blue (NSF Grade) PAGE 3 OF 4
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## HAZARDOUS DECOMPOSITION PRODUCTS

Gaseous combinations of carbon, hydrogen, nitrogen and oxygen may occur at elevated temperatures.

#### HAZARDOUS POLYMERIZATION

Hazardous polymerization will not occur when stored and used as directed.

## POLYMERIZATION CONDITIONS TO AVOID

N.ap

## **SECTION VII - SPILL AND LEAK PROCEDURES**

## **SPILLAGE**

Absorb with an inert material (e.g. earth or sand). Sweep up, place into suitable labelled containers, seal and dispose of properly. Flush area with detergent and water.

#### WASTE DISPOSAL METHODS

Dispose of in accordance with Local, State and Federal Regulations.

## **SECTION VIII - SPECIAL PROTECTION INFORMATION**

## PERSONAL PROTECTIVE MEASURES

RESPIRATORY: In confined areas or where good natural/mechanical ventilation is not available

an appropriate NIOSH or MSHA approved respirator should be worn.

SKIN : Impermeable gloves, such as Neoprene, Nitrile or PVC. Wash hands with soap

and water and use hand cream. Suitable protective clothing to minimize skin

contact. Remove contaminated clothing and wash before reuse.

EYE : Safety glasses or goggles. Eyewash station.

## MECHANICAL PROTECTIVE MEASURES

VENTILATION : Where adequate natural ventilation is not available provide suitable local

exhaust ventilation.

## OTHER PROTECTIVE EQUIPMENT

: Where there is a risk of contamination of footwear, safety boots should be worn

and cleaned thoroughly before reuse.

#### OTHER COMMENTS

: Where machining or abrading of cured material leads to the production of respirable and/or nuisance dust, an appropriate NIOSH or MSHA approved

respirator should be worn.

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## **SECTION IX - SAFE HANDLING AND STORAGE**

# HANDLING AND STORAGE PRECAUTIONS HANDLING

Avoid breathing vapors and contact with skin and eyes.

## **STORAGE**

Overheating may cause containers to rupture. Containers should be stored under cool, dry conditions. Empty containers will retain residue and may be dangerous. Check all containers for leaks at regular intervals and before use.

## HYGIENE PRACTICES

When using, do not eat, drink or smoke. Remove contaminated clothing and launder before reuse. Wash hands with soap and water after handling this product.

## **SECTION X - REGULATORY INFORMATION**

#### SARA TITLE III - NOTIFICATION OF TOXIC CHEMICALS

None of the constituents of this product are subject to the reporting requirements under section 313 of the Superfund Amendment and Reauthorization Act of 1986 (40 CFR Part 372).

## DISCLAIMER

To the best of our knowledge, the information contained herein is accurate. However, some of the information presented and conclusions drawn are derived from sources other than direct test data on the product itself and while Belzona Inc. believe such sources to be reliable, the information is provided without any warranty regarding its correctness.

Since Belzona Inc. has no control over the conditions under which the product will be used, liability will not be assumed to exceed replacement or refund of the purchase price of this product. Except as stated herein, there are no express or implied warranties including implied warranties of merchantability or fitness for a particular purpose. Belzona Inc. assumes no liability for injury or incidental or consequential damage arising out of the storage, handling, use or disposal of this product.

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## **SECTION I - PRODUCT IDENTIFICATION**

PRODUCT NUMBER 1101/1336

Belzona® 1341 (Supermetalglide) Solidifier (NSF Grade) PRODUCT NAME

PRODUCT CLASS Epoxide resin

# SECTION II - HAZARDOUS INGREDIENTS/TOXICOLOGICAL DATA

Hazardous Components	% by CAS Weight Num		oosure Limits ACGIH TLV ppm mg/m <sup>3</sup>	Toxicity LD₅₀ Oral Dermal mg/Kg	LC <sub>50</sub> Inhal ppm
DGEBF-Epoxy resin		64-14-4 NIA	NIA NIA	>2000 NIA	NIA
DGEBA-Epoxy resin		68-38-6 NIA	NIA NIA	>2000 NIA	NIA

## CARCINOGENICITY

No data is available for the mixture, however, none of the ingredients are listed as carcinogens by OSHA, NTP, ACGIH or IARC.

# **SECTION III - PHYSICAL DATA**

APPEARANCE AND ODOR : Clear light yellow liquid.

**BOILING POINT** : Decomposes SPECIFIC GRAVITY: 1.16 **VAPOR PRESSURE** : NIA VAPOR DENSITY: NIA **EVAPORATION RATE** : N.ap % VOLATILE BY VOLUME : N.ap

**SOLUBILITY IN WATER** : Negligible (<0.1%)

## **SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

**EXPLOSION LIMITS** FLASH POINT : 240°C LOWER : None TEST METHOD : ASTM D1310 Tag open cup UPPER : None PRODUCT NAME : Belzona® 1341 Solidifier (NSF Grade) PAGE 2 OF 4
PRODUCT NUMBER : 1101/1336 DATE PREPARED : 21 October 1997

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OSHA FLAMMABILITY CLASS : N.ap FLAMMABILITY INDEX (NFPA) : 1 Slight REACTIVITY INDEX (NFPA) : 0 Nil HEALTH HAZARD (NFPA) : 2 Moderate

EXTINGUISHING MEDIA : Water fog (not a direct stream of water), foam, carbon dioxide,

dry chemical.

## SPECIAL FIRE FIGHTING PROCEDURES

Wear protective clothing and use self-contained breathing apparatus. Full bunker gear should be worn in extreme cases. Use sand to contain burning material.

## UNUSUAL FIRE AND EXPLOSION HAZARDS

Decomposition and combustion products may be hazardous.

## **SECTION V - HEALTH HAZARDS**

ROUTE(S) OF ENTRY : Skin contact, skin absorption, eye contact.

PRIME HAZARD(S) : Skin sensitizer and skin irritation.

**EFFECTS OF EXPOSURE** 

Acute : Skin and eye irritation.

Chronic : Irritation, sensitization and dermatitis.

**EMERGENCY AND FIRST AID PROCEDURES** 

Inhalation : If symptoms are experienced, remove source of contamination and/or move

victim to fresh air. If recovery is delayed or there are signs of distress obtain

medical attention immediately.

Eye contact : Flush eyes with water for 15 minutes. Seek medical advice if any irritation

persists.

Skin contact : Immediately remove excess with a clean cloth and wash skin thoroughly with

soap and water. If irritation or inflammation persists, seek medical advice.

Ingestion : If swallowed, do not induce vomiting. Rinse mouth with water and drink plenty

of water. Call TAMPA BAY Regional Poison Center (Tel.No.1-800-282-3171) and/or seek medical advice.

## MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Skin and eye conditions.

## **SECTION VI - REACTIVITY DATA**

STABILITY: Stable

STABILITY CONDITIONS TO AVOID: N.ap

INCOMPATIBILITY (MATERIALS TO AVOID CONTACT WITH)

Strong oxidizing agents, acids, bases and amines.

PRODUCT NAME : Belzona® 1341 Solidifier (NSF Grade) PAGE 3 OF 4

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## HAZARDOUS DECOMPOSITION PRODUCTS

Gaseous combinations of carbon, hydrogen and oxygen may occur at elevated temperatures.

## HAZARDOUS POLYMERIZATION

Hazardous polymerization will not occur when stored and used as directed.

## POLYMERIZATION CONDITIONS TO AVOID

N.ap

## **SECTION VII - SPILL AND LEAK PROCEDURES**

#### **SPILLAGE**

Absorb with an inert material (e.g. earth or sand). Sweep up, place into suitable labelled containers, seal and dispose of properly. Flush area with detergent and water.

#### WASTE DISPOSAL METHODS

Dispose of in accordance with Local, State and Federal Regulations.

## **SECTION VIII - SPECIAL PROTECTION INFORMATION**

## PERSONAL PROTECTIVE MEASURES

RESPIRATORY: In confined areas or where good natural/mechanical ventilation is not available

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and water and use hand cream. Suitable protective clothing to minimize skin

contact. Remove contaminated clothing and wash before reuse.

EYE : Safety glasses or goggles. Eyewash station.

## MECHANICAL PROTECTIVE MEASURES

VENTILATION : Where adequate natural ventilation is not available provide suitable local

exhaust ventilation.

## OTHER PROTECTIVE EQUIPMENT

: Where there is a risk of contamination of footwear, safety boots should be worn

and cleaned thoroughly before reuse.

#### OTHER COMMENTS

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# HANDLING AND STORAGE PRECAUTIONS HANDLING

Avoid contact with skin and eyes.

## **STORAGE**

Overheating may cause containers to rupture. Containers should be stored under cool, dry conditions. Empty containers will retain residue and may be dangerous. Check all containers for leaks at regular intervals and before use.

## HYGIENE PRACTICES

When using, do not eat, drink or smoke. Remove contaminated clothing and launder before reuse. Wash hands with soap and water after handling this product.

## **SECTION X - REGULATORY INFORMATION**

#### SARA TITLE III - NOTIFICATION OF TOXIC CHEMICALS

None of the constituents of this product are subject to reporting requirements under section 313 of the Superfund Amendment and Reauthorization Act of 1986 (40 CFR Part 372).

## DISCLAIMER

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